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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/772,796	02/04/2004	Brian M. Blount	6305-67417-01	5238
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KLARQUIST SPARKMAN, LLP 121 SW SALMON STREET SUITE 1600 PORTLAND, OR 97204			EXAMINER GILBERT, WILLIAM V	
			ART UNIT 3635	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/772,796

Applicant(s)

BLOUNT, BRIAN M.

Examiner

William V. Gilbert

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 33-62 is/are pending in the application.
- 4a) Of the above claim(s) 33-37 and 56-62 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 38-55 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

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DETAILED ACTION

This is a non-final action. Claims 33-37 and 56-62 are withdrawn. Claims 38-55 are examined below.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 38-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reynolds (U.S. Patent No. 2,971,295).

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Claim 38: Reynolds discloses a thin reinforced concrete panel (Fig. 4: 36) having a rectangular body of concrete with first and second faces, a pair of opposite side edges and a pair of opposite end edges, a first set of prestressed parallel tendons (44) extending throughout the body between the end edges, a second set of prestressed parallel tendons (44: on the side edge) extending through the body between the opposite side edges, the first set of tendons comprises a plurality of pairs of tendons, with first and second tendons spaced a predetermined distance from the first and second face, respectively, the first and second tendons are offset laterally from one another, the second set of tendons (44) is in pairs and comprises a third and fourth tendon that are spaced a predetermined distance from the first and second faces, respectively, the third and fourth tendon are offset laterally from one another, the pairs of tendons for the first and second set are spaced substantially equidistantly from each adjacent pair (as shown in Fig. 4). Reynolds does not disclose that the tendons are the same diameter or that they are pretensioned to the same tension. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to use the same diameter tendon and use the same tension because these limitations are well known in the art as using different size tendons and

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different tensioning could result in improper design and failure in the slab. Second, Reynolds does not disclose the limitations of the spacing of the tendons from the faces of the slab as claimed. It would have been obvious at the time the invention was made to a person having ordinary skill in the art as a matter of design choice to have this limitation because one of ordinary skill in the art would place the tendons appropriately so that the proper tensioning and load distribution would result without failure, and one would have the first and second predetermined distances different in order to avoid contact of the tendons as they cross.

Claim 39-43: Reynolds discloses the claimed invention except for the spacing of the faces (Claims 39 and 41), the diameter of the tendons (Claims 40 and 42), and the sufficiency of the prestress (Claim 43). It would have been obvious at the time the invention was made to a person having ordinary skill in the art as a matter of design choice to have these limitations because Reynolds notes that the disclosures of the slab are not limiting (Col. 6, lines 20-30), so one of ordinary skill in the art could design the slab in Reynolds to meet the desired limitations, including thickness and tendon size, and one would design the slab to that the tendons would not fail when the tension is applied.

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Claims 44-46: the prior art of record discloses the claimed invention including that the stressing rods are wire rope (using the broadest reasonable interpretation,) but not the diameter of the tendon, nor the spacing of the tendon. It would have been obvious at the time the invention was made to a person having ordinary skill in the art as a matter of design choice to have these limitations because one of ordinary skill in the art would design a prestressed panel to function properly without failure.

Claim 47: it is an inherent feature that the face of the slab is textured (e.g. a smooth, brushed, or natural textured finish) using the broadest reasonable interpretation.

Claim 48: Reynolds discloses a thin, reinforce concrete panel (36) comprising a concrete body with first and second faces, a pair of opposite side edges and a pair of opposite end edges, a first plurality of pairs of prestressed tendons (44) extending through the body between the opposite side edges and positioned so that one of the tendons is spaced a first predetermined distance from a first centroidal plane proximate the first face, a second plurality of pairs of prestressed tendons extending through the body between opposite end edges and positioned so that one tendon of each pair is spaced a second predetermined distance from a second centroidal axis proximate the first face. Note that the predetermined distances

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as claimed can be the same or different. While Reynolds discloses the units are in pairs, it does not disclose the relativity of the first and second predetermined distances as claimed. It would have been obvious at the time the invention was made to a person having ordinary skill in the art as a matter of design choice to have this limitation because one of ordinary skill in the art would place the tendons appropriately so that the proper tensioning and distribution would result without failure.

Claim 49: the prior art of record discloses the claimed invention except that the tendons have the same diameter, nor that the second predetermined distance is greater than the first predetermined distance with the limitations as claimed. It would have been obvious at the time the invention was made to a person having ordinary skill in the art as a matter of design choice to have this limitation because it is well known in the art to have the tendons in a slab be the same size in order to evenly distribute the tensioning load and one of ordinary skill in the art would have the predetermined distances be different so that the tendons would not come in contact as they cross each other.

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Claim 50: Reynolds discloses a plurality of spaced-apart second tendons extending through said body between opposite side edges.

Claim 51: the phrases "formed by positioning..." and "cutting the material..." are method steps and only the apparatus is provided consideration. The tendon (12) has a loop (nut portion) such that the loop and portions of the material (tendon, 12) overlap.

Claim 52: Reynolds discloses a thin reinforced concrete panel (36) comprising a concrete body with a first and second face, the faces are parallel to each other and a panel (the slab) between the faces, a pair of opposite side edges and a pair of opposite end edges, a first set of prestressed parallel tendons (44) extending through the body between the opposite end edges, a second set of parallel tendons (44) extending through the opposite side edges, the first set of tendons comprise a plurality of pairs of tendons, comprising a first and second tendon, the first tendons being at a first distance from the mid-plane, between the mid-plane and first face of the body (see Fig. 4) the second tendons being at a second distance from the mid plane and between the mid-plane and second face of the body (see Fig. 4), the first and second tendons being offset laterally from one another, the second set of tendons comprises

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a plurality of pairs of tendons having a third and fourth tendon, the third and fourth tendons are at third and fourth distances from the mid-plane and between the mid-plane and first and second faces, respectively, the third and fourth tendons of each pair being offset laterally from one another. Note that according to Figure 4, all four tendons are spaced from a mid-plane and that under the broadest reasonable interpretation, all four distances can either be the same or different. Reynolds does not disclose that each of the tendons is prestressed to substantially the same tension. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to have the same tension on the tendons in order to properly distribute the loadings of the panel, and uneven tensions could result in failure of the panel.

Claims 53 and 54: though the prior art of record does not specifically disclose the distances, it would have been obvious at the time the invention was made to a person having ordinary skill in the art as a matter of design choice to have this limitation because one of ordinary skill in the art would design a panel so that it would not fail, and if the desired feature required that the distances be different, than one of ordinary skill in the art would have the distances as different. See Reynolds: Col. 6, lines 20-31.

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Claim 55: the first and second tendons are in a pair of tendons and have a centerline there between (an inherent feature), however, it does not disclose the limitation as claimed. It would have been obvious at the time the invention was made to a person having ordinary skill in the art as a matter of design choice to have this limitation because one of ordinary skill in the art would design a prestressed panel to not fail and the prior art of record is capable of meeting the limitation as needed (see Col. 6, lines 20-31).

Response to Arguments

2. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Applicant's amendment to Claim 48 overcomes the 35 U.S.C. §112 rejection and Claim objection and they are withdrawn.

Terminal Disclaimer

3. A terminal disclaimer has been approved and entered on 13 August 2007.

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Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Valverde (U.S. Patent No. 6,119,417: note element 40).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William V. Gilbert whose telephone number is 571.272.9055. The examiner can normally be reached on Monday - Friday, 08:00 to 17:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Chilcot can be reached on 571.272.6777. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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BRIEF EXAMINATION
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